

Title (en)  
ROTARY DISPLACEMENT COMPRESSOR WITH LIQUID CIRCULATION SYSTEM

Title (de)  
ROTATIONSKOMPRESSOR MIT FLÜSSIGKEITZIRKULATIONSSYSTEM

Title (fr)  
COMPRESSEUR ROTATIF A RECIRCULATION DU LIQUIDE

Publication  
**EP 0766790 A1 19970409 (EN)**

Application  
**EP 95919702 A 19950407**

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• SE 9402177 A 19940621

Abstract (en)  
[origin: US5727936A] PCT No. PCT/SE95/00377 Sec. 371 Date Dec. 10, 1996 Sec. 102(e) Date Dec. 10, 1996 PCT Filed Apr. 7, 1995 PCT Pub. No. WO95/35446 PCT Pub. Date Dec. 28, 1995A rotary displacement compressor having an inlet channel for introducing low pressure gas, an outlet channel through which compressed gas escapes, and at least one rotor mounted in bearings and operating in a working space. The compressor includes a liquid injector for injecting liquid into the working space, a liquid separator provided in the outlet channel for separating liquid from the compressed gas, and a pressure liquid conduit connecting the liquid separator and the liquid injection port. A bearing lubrication circuit includes a tank, a pump, a supply conduit for supplying liquid from the pump to the bearings in which the rotor is mounted, a withdrawal conduit for withdrawing liquid from the bearings to the tank, and a pump inlet conduit for supplying liquid from the tank to the pump. The bearing lubrication circuit further includes a leakage path connecting the tank to a first cavity in the working space and a drainage connection connecting the tank to a second cavity in the working space, the first cavity having a higher pressure than the second cavity.

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